Amendments to the Specification:

Please replace paragraph [0038] on page 10 with the following amended paragraph:

[0038] Hole transport layer 125 may include a material capable of transporting holes. Hole transport layer 130 may be intrinsic (undoped), or doped. Doping may be used to enhance conductivity. α-NPD and TPD are examples of intrinsic hole transport layers. An example of a p-doped hole transport layer is m-MTDATA doped with F_4-TCNQ at a molar ratio of 50:1, as disclosed in ~~United States Patent Application No. 10/173,682 to Forrest et al.~~ United States Patent Application Publication No. 2003/0230980, which is incorporated by reference in its entirety. Other hole transport layers may be used.

Please replace paragraph [0040] on page 11 with the following amended paragraph:

[0040] Electron transport layer 140 may include a material capable of transporting electrons. Electron transport layer 140 may be intrinsic (undoped), or doped. Doping may be used to enhance conductivity. Alq_3 is an example of an intrinsic electron transport layer. An example of an n-doped electron transport layer is BPhen doped with Li at a molar ratio of 1:1, as disclosed in ~~United States Patent Application No. 10/173,682 to Forrest et al.~~ United States Patent Application Publication No. 2003/0230980, which is incorporated by reference in its entirety. Other electron transport layers may be used.

Please replace paragraph [0043] on page 12 with the following amended paragraph:

[0043] Blocking layers may be used to reduce the number of charge carriers (electrons or holes) and / or excitons that leave the emissive layer. An electron blocking layer 130 may be disposed between emissive layer 135 and the hole transport layer 125, to block electrons from leaving emissive layer 135 in the direction of hole transport layer 125. Similarly, a hole blocking layer 140 may be disposed between emissive layer135 and electron transport layer 145, to block holes from leaving emissive layer 135 in the direction of electron transport layer 140. Blocking layers may also be used to block excitons from diffusing out of the emissive layer. The theory and use of blocking layers is described in more detail in United States Patent No. 6,097,147 and ~~United States Patent Application No.~~

~~10/173,682 to Forrest et al.~~ United States Patent Application Publication No. 2003/0230980, which are incorporated by reference in their entireties.

Please replace paragraph [0045] on pages 12-13 with the following amended paragraph:

[0045] Generally, injection layers are comprised of a material that may improve the injection of charge carriers from one layer, such as an electrode or an organic layer, into an adjacent organic layer. Injection layers may also perform a charge transport function. In device 100, hole injection layer 120 may be any layer that improves the injection of holes from anode 115 into hole transport layer 125. CuPc is an example of a material that may be used as a hole injection layer from an ITO anode 115, and other anodes. In device 100, electron injection layer 150 may be any layer that improves the injection of electrons into electron transport layer 145. LiF / Al is an example of a material that may be used as an electron injection layer into an electron transport layer from an adjacent layer. Other materials or combinations of materials may be used for injection layers. Depending upon the configuration of a particular device, injection layers may be disposed at locations different than those shown in device 100. More examples of injection layers are provided in ~~U.S. Patent Application Serial No. 09/931,948 to Lu et al.~~ United States Patent Application Publication No. 2004/0174116, which is incorporated by reference in its entirety. A hole injection layer may comprise a solution deposited material, such as a spin-coated polymer, e.g., PEDOT:PSS, or it may be a vapor deposited small molecule material, e.g., CuPc or MTDATA.

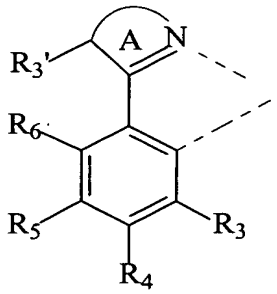
Please replace paragraph [0040] on page 11 with the following amended paragraph:

[0041] A protective layer may be used to protect underlying layers during subsequent fabrication processes. For example, the processes used to fabricate metal or metal oxide top electrodes may damage organic layers, and a protective layer may be used to reduce or eliminate such damage. In device 100, protective layer 155 may reduce damage to underlying organic layers during the fabrication of cathode 160. Preferably, a protective

layer has a high carrier mobility for the type of carrier that it transports (electrons in device 100), such that it does not significantly increase the operating voltage of device 100. CuPc, BCP, and various metal phthalocyanines are examples of materials that may be used in protective layers. Other materials or combinations of materials may be used. The thickness of protective layer 155 is preferably thick enough that there is little or no damage to underlying layers due to fabrication processes that occur after organic protective layer 160 is deposited, yet not so thick as to significantly increase the operating voltage of device 100. Protective layer 155 may be doped to increase its conductivity. For example, a CuPc or BCP protective layer 160 may be doped with Li. A more detailed description of protective layers may be found in ~~U.S. Patent Application Serial No. 09/931,948 to Lu et al.~~ United States Patent Application Publication No. 2004/0174116, which is incorporated by reference in its entirety.

Please replace paragraph [0056] on pages 17-18 with the following amended paragraph:

[0056] In an embodiment of the present invention, a phosphorescent emissive material having improved efficiency when incorporated into an organic light emitting device is provided. The emissive material includes a photoactive ligand having the following structure:



(II)

wherein

M is a metal having an atomic weight greater than 40;

R_3' is a substituent selected from the group consisting of alkyl, heteroalkyl, aryl, heteroaryl, and aralkyl, wherein R_3' is optionally substituted by one or more substituents Z;

R_5 is a substituent selected from the group consisting of aryl and heteroaryl, wherein said aryl or heteroaryl is unsubstituted or optionally, substituted with one or more non-aromatic groups;

ring A is an aromatic heterocyclic or a fused aromatic heterocyclic ring with at least one nitrogen atom that is coordinated to the metal M, wherein the ring A can be optionally substituted with one or more substituents Z;

R_3 is a substituent selected from the group consisting of H, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, C_nF_{2n+1}, trifluorovinyl, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl or a heterocyclic group;

R_4 is a substitutent selected from the group consisting of H, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, C_nF_{2n+1}, trifluorovinyl, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl or a heterocyclic group;

additionally or alternatively, R_3 and R_4, together from independently a fused 4 to 7-member cyclic group, wherein said cyclic group is cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl; and wherein said cyclic group is optionally substituted by one or more substitutents Z;

R_6 is a substitutent selected from the group consisting of H, alkyl, alkenyl, alkynyl, alkylaryl, CN, CF_3, C_nF_{2n+1}, trifluorovinyl, CO_2R, C(O)R, NR_2, NO_2, OR, halo, aryl, heteroaryl, substituted aryl, substituted heteroaryl or a heterocyclic group;

alternatively, R_3' and R_6 may be bridged by a group selected from $-CR_2-CR_2-$, -CR=CR-, $-CR_2-$, -O-, -NR-, $-O-CR_2-$, $-NR-CR_2-$, and -N=CR-;

each R is independently H, alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, or aralkyl; wherein R is optionally substituted by one or more substituents Z;

each Z is independently a halogen, R', O-R', $N(R')_2$, SR', C(O)R', C(O)OR', $C(O)N(R')_2$, CN, NO_2, SO_2, SOR', SO_2R', or SO_3R';

each R' is independently H, alkyl, perhaloalkyl, alkenyl, alkynyl, heteroalkyl, aralkyl, aryl, or heteroaryl.

Please add the following paragraph [0001] on page 1 before the "Field of the Invention."

Also, please re-number the paragraphs accordingly.

[0001] The claimed invention was made by, on behalf of, and/or in connection with one or more of the following parties to a joint university corporation research agreement: Princeton University, The University of Southern California, and the Universal Display

Corporation. The agreement was in effect on and before the date the claimed invention was made, and the claimed invention was made as a result of activities undertaken within the scope of the agreement.